CENTERS FOR DISEASE CONTROL

July 21, 1989 / Vol. 38 / No. 28

MMWR

MORBIDITY AND MORTALITY WEEKLY REPORT

485 Occupational Disease Surveillance: Carpal Tunnel Syndrome
489 Counseling and Testing Intravenous-Drug Users for HIV Infection — Boston
496 HIV Infection Reporting — United States
499 Announcement of "Epidemiology in Action" Course

Current Trends

Occupational Disease Surveillance: Carpal Tunnel Syndrome

Manifestations of carpal tunnel syndrome (CTS) (see box, page 486) include pain, numbness, and weakness in the median nerve distribution of the hand as a result of compression or irritation of the median nerve as it passes through the carpal tunnel in the wrist (*3*). Without intervention, CTS can lead to marked discomfort, impaired hand function, and disability. Workers who perform repetitive tasks are at risk for CTS and include garment workers, butchers, grocery checkers, electronics assembly workers, typists, musicians, packers, housekeepers/cooks, and carpenters (*4,5*). However, no reliable data exist on the frequency of work-related CTS in the general working population. Surveillance of work-related CTS is limited because of inadequate training of health professionals (*6*) and underreporting of recognized cases (*7*). In addition, standard definitions for work-related musculoskeletal injuries are necessary to improve surveillance (*8*).

In early 1988, the California Occupational Health Program (COHP) surveyed health-care practitioners to measure the occurrence of this condition in Santa Clara County (1987 population, 1.4 million), which has a variety of service and manufacturing industries, and to compare these studies with cases actually reported to the state. The survey was conducted as part of the Sentinel Event Notification System for Occupational Risks (SENSOR) program—a collaborative effort involving the National Institute for Occupational Safety and Health (NIOSH), of CDC, and 10 state health departments—which is intended to improve occupational disease surveillance at the state and local levels.

COHP staff identified 1698 Santa Clara County health-care providers who practiced in specialties and settings considered to be relevant to the care of CTS patients. Practitioners were administered questionnaires by either telephone or mail. Of 515 (30%) providers who responded, 489 (95%) reported caring for a total of 7214 CTS patients in 1987. Of these, responding providers believed 3413 (47%) cases may have been work-related. Work-related cases were seen by 377 providers in various settings, including internal medicine, industrial/occupational medicine, chiropractic, and physical therapy (Table 1).

Carpal Tunnel Syndrome — Continued

SURVEILLANCE CASE DEFINITION FOR WORK-RELATED CARPAL TUNNEL SYNDROME (CTS)

A. One or more of the following symptoms suggestive of CTS is present*: paresthesias, hypoesthesia, pain, or numbness affecting at least part of the median nerve distribution† of the hand(s).

B. Objective findings consistent with CTS are present in the affected hand(s) and wrist(s):

EITHER

1. Physical examination findings—Tinel's sign§ present or positive Phalen's test¶ or diminished or absent sensation to pin prick in the median nerve distribution of the hand.

OR

2. Electrodiagnostic findings indicative of median nerve dysfunction across the carpal tunnel.**

C. Evidence of work-relatedness—a history of a job involving *one or more* of the following activities before the development of symptoms††:

1. Frequent, repetitive use of the same or similar movements of the hand or wrist on the affected side(s).
2. Regular tasks requiring the generation of high force by the hand on the affected side(s).
3. Regular or sustained tasks requiring awkward hand positions on the affected side(s).§§
4. Regular use of vibrating hand-held tools.
5. Frequent or prolonged pressure over the wrist or base of the palm on the affected side(s).

---

*Symptoms should have lasted at least 1 week or, if intermittent, have occurred on multiple occasions. Other causes of hand numbness or paresthesias, such as cervical radiculopathy, thoracic outlet syndrome, and pronator teres syndrome, should be excluded by appropriate clinical evaluation (*1*).

†Generally includes palmar side of thumb, index finger, middle finger, and radial half of ring finger; dorsal (back) side of same digits distal to PIP joint; and radial half of palm. Pain and paresthesias may radiate proximally into the arm.

§Paresthesias are elicited or accentuated by gentle percussion over the carpal tunnel.

¶Paresthesias are elicited or accentuated by maximal passive flexion of the wrist for one minute.

**Criteria for abnormal electrodiagnostic findings are generally determined by the individual laboratories (see, for example, references 1 and 2).

††A temporal relationship of symptoms to work or an association with cases of CTS in co-workers performing similar tasks is also evidence of work-relatedness.

§§Awkward hand positions predisposing to CTS include the use of a pinch grip (as when holding a pencil), extreme flexion, extension, or ulnar deviation of the wrist, and use of the fingers with the wrist flexed.

Carpal Tunnel Syndrome — Continued

In contrast to these figures, 71 cases of work-related CTS were reported in 1986 from Santa Clara County under the California Doctor's First Report program, which requires that physicians report all cases of suspected occupational injury or illness to the state. Even though the Santa Clara County provider survey may have counted some CTS cases more than once, the low overall response rate (30%) suggests that the number of reported work-related cases may be an underestimation of the annual occurrence of CTS in the county. The data also indicate that work-related CTS is greatly underreported to the Doctor's First Report program.

Reported by: K Cummings, MPH, N Maizlish, PhD, L Rudolph, MD, K Dervin, MPH, A Ervin, Epidemiologic Studies Section, California Occupational Health Program, California Dept of Health Svcs. Div of Surveillance, Hazard Evaluations, and Field Studies, and Office of the Director, National Institute for Occupational Safety and Health, CDC.

Editorial Note: Work-related CTS is a cumulative trauma disorder (*4*) caused by job tasks that subject the hand and wrist to certain biomechanical stresses, including 1) repetitive movements of the hand, 2) forceful grasping or pinching of tools or other objects, 3) awkward positions of the hand and wrist, 4) direct pressure over the carpal tunnel, and 5) use of vibrating hand-held tools (*5*). Because repetitive hand movements are required in many service and industrial occupations, new high-risk groups for CTS and other cumulative trauma disorders continue to be identified. Nonoccupational factors associated with CTS include diabetes mellitus, rheumatoid arthritis, and pregnancy (*5*); patients with nonoccupational risk factors are also at risk for work-related CTS.

The diagnosis is confirmed by physical examination or electrodiagnostic studies (*5*). Other conditions that produce similar symptoms should be excluded by appropriate clinical evaluation. Even though CTS can often be managed with conservative measures (e.g., wrist immobilization and nonsteroidal anti-inflammatory medications

TABLE 1. Reported carpal tunnel syndrome (CTS) cases, by health-care providers — Santa Clara County, California, 1988

Specialty	No. providers reporting CTS cases	No. CTS cases reported	Work-related CTS cases	
			No.	(%)
Chiropractic	95	1659	759	(46)
Neurology	22	1032	515	(50)
Internal medicine	116	1352	413	(31)
Family practice	65	627	346	(55)
Hand surgery	6	378	315	(83)
Industrial/ Occupational medicine	11	300	281	(94)
Orthopedics	39	592	272	(46)
Other	92	588	190	(32)
Physical therapy	19	199	169	(85)
Rheumatology	12	384	107	(28)
Rehabilitation medicine	2	50	25	(50)
Emergency services	10	53	21	(40)
Total	**489**	**7214**	**3413**	**(47)**

Carpal Tunnel Syndrome — Continued

[*4*]), recognition of work-related CTS is important, since without job redesign or reassignment, symptoms are likely to recur when the patient resumes the precipitating tasks (*4*). For all patients with symptoms suggestive of CTS, an occupational history should be obtained that includes a description of tasks involving use of the hands. Failure to eliminate contributory job factors can result in recurrence or progression of symptoms, impaired use of the hand, and the need for surgical treatment. Redesign of tools, workstations, and job tasks can prevent occurrence of CTS among co-workers (*4*). Surveillance of work-related CTS, including the use of health-care–provider reports, can aid in identifying high-risk workplaces, occupations, and industries and in directing appropriate preventive measures.

The COHP survey indicates that although work-related CTS was commonly recognized by health-care providers, it was substantially underreported. Even though more than half the states have reporting programs for occupational illnesses (*9*), underreporting is common (*7*).

The SENSOR program aims to help state health departments increase both health-care–provider reporting of work-related illness and prevention efforts. To facilitate these provider-based surveillance activities and to enhance uniformity of reporting in the states, NIOSH will periodically disseminate recommended surveillance case definitions for selected occupational diseases and injuries. Because these definitions are designed for surveillance-related functions, they may differ from those used for other purposes, such as determining workers' compensation or level of disability.

The surveillance case definition for work-related CTS* (criteria A, B, and C, see box) is recommended for surveillance of work-related CTS by state health departments receiving reports of cases from physicians and other health-care providers. In certain settings, such as workplace surveys, a case definition consisting of criteria A and C can be used.

References

1. Sandzen SC Jr. Carpal tunnel syndrome. Am Fam Physician 1981;24:190–204.
2. Goodgold J, Eberstein A. Electrodiagnosis of neuromuscular diseases. 2nd ed. Baltimore: Williams & Wilkins, 1977.
3. Bleecker ML, Agnew J. New techniques for the diagnosis of carpal tunnel syndrome. Scand J Work Environ Health 1987;13:385–8.
4. Putz-Anderson V, ed. Cumulative trauma disorders: a manual for musculoskeletal diseases of the upper limbs. London: Taylor and Francis, 1988.
5. Feldman RG, Goldman R, Keyserling WM. Classical syndromes in occupational medicine: peripheral nerve entrapment syndromes and ergonomic factors. Am J Ind Med 1983;4: 661–81.
6. Wegman DH, Froines JR. Surveillance needs for occupational health [Editorial]. Am J Public Health 1985;75:1259–61.
7. Seixas NS, Rosenman KD. Voluntary reporting system for occupational disease: pilot project, evaluation. Public Health Rep 1986;101:278–82.

*This definition was reviewed and approved by a panel of consultants convened by NIOSH that comprise the Surveillance Subcommittee of the NIOSH Board of Scientific Counselors: H Anderson, MD, Wisconsin Department of Health and Social Services; M Cullen, MD, Yale University School of Medicine; E Eisen, ScD, Harvard School of Public Health; R Feldman, MD, Boston University School of Medicine; J Hughes, MD, University of California, San Francisco; MJ Jacobs, MD, University of California, Berkeley; K Kriess, MD, National Jewish Center for Immunology and Respiratory Medicine; J Melius, MD, New York State Department of Health; J Peters, MD, University of Southern California School of Medicine; D Wegman, MD, University of Lowell.

Carpal Tunnel Syndrome — Continued

8. Association of Schools of Public Health/National Institute for Occupational Safety and Health. Proposed national strategies for the prevention of leading work-related diseases and injuries: part 1. Washington, DC: Association of Schools of Public Health, 1986:17–34.
9. Muldoon JT, Wintermeyer LA, Eure JA, et al. Occupational disease surveillance data sources, 1985. Am J Public Health 1987;77:1006–8.

Counseling and Testing Intravenous-Drug Users for HIV Infection — Boston

Despite the increased risk for human immunodeficiency virus (HIV) infection among intravenous-drug users (IVDUs), many IVDUs have not been counseled and tested for HIV infection. In the Boston metropolitan area, which has an estimated 14,000 IVDUs, only 473 persons who identified themselves as IVDUs were tested for HIV antibody at anonymous counseling and testing sites and sexually transmitted disease (STD) clinics in 1988. To increase counseling and HIV testing of IVDUs in the Boston area, Project TRUST (Teaching, Referral, Understanding, Support, and Testing) was established at Boston City Hospital in November 1987 in collaboration with the City of Boston's Department of Health and Hospitals, the Division of Drug Rehabilitation of the Massachusetts Department of Public Health (MDPH), and the Massachusetts Center for Disease Control, MDPH.

Project TRUST staff includes nurses, counselors, and outreach workers (some of whom are recovering IVDUs). Services are provided without charge in a setting intended to attract IVDUs. Project TRUST is located in a neighborhood with a visible drug-user presence and is promoted among IVDUs by pamphlets and word of mouth.

Project TRUST offers anonymous testing for HIV antibody after counseling about HIV prevention and the advantages/disadvantages of the test. The use of bleach to disinfect needles and use of condoms to reduce sexual transmission of HIV are described, and supplies of each are provided free of charge. Pregnancy testing, the Mantoux skin test for tuberculosis, and selected additional services are also available on-site. Referrals are made for drug and alcohol treatment, social services, and medical evaluation. Social support groups for HIV-seropositive English- and Spanish-speaking clients meet on-site.

During its first year of operation, Project TRUST offered counseling and HIV testing to 688 clients. Of the 635 (92%) who were voluntarily tested for HIV antibody, 107 (17%) tested positive (Table 1, page 495). Seropositivity was greater in black and Hispanic clients and in current IVDUs than in white clients and former IVDUs, respectively; sex partners of IVDUs had a lower seroprevalence than did IVDUs themselves (Table 1, Figure 1, page 495).

Of the 635 clients tested, 503 (79%) returned to Project TRUST to receive HIV-antibody test results and counseling (Table 1). The proportion returning did not vary substantially by sex, race/ethnicity, or risk behavior group.

Excluding laboratory testing (which was funded separately), expenditures for personnel, overhead, and supplies for the first year of operation of Project TRUST were $174,120, or $253 per client served.

Project TRUST also includes outreach to high-risk neighborhoods, hospital inpatients, and patients in chronic-care facilities. These outreach programs include education sessions about drug addiction, HIV infection, and healthy lifestyles conducted in schools, drug and alcohol detoxification programs, and STD clinics. Specific

Project TRUST – Continued

efforts are made to provide referrals to and information about other community resources, and psychologic support for hospitalized persons with HIV infection is provided.

Reported by: BA Comella, F Falch, KA Steger, MPH, J Harris, MD, GA Lamb, MD, DE Craven, MD, Boston City Hospital, Boston; LM Kunches, MPH, V Berardi, Massachusetts Center for Disease Control, Jamaica Plain; D Mulligan, Massachusetts Dept of Drug Rehabilitation, Boston, Massachusetts. Office of the Director, Center for Prevention Svcs, CDC.

Editorial Note: The effectiveness of AIDS prevention efforts in many states and urban areas depends greatly on interrupting the chain of HIV transmission among IVDUs, their sex partners, and their children. In 1988, 33.3% of U.S. AIDS cases and 27.8% in Massachusetts were associated with IV-drug use (*1*).

Features that may contribute to the acceptance of Project TRUST in Boston are the range of free services available without appointment, the presence of former IVDUs on the staff, and anonymity (i.e., clients are given a code rather than registered by

(Continued on page 495)

TABLE I. Summary – cases of specified notifiable diseases, United States

Disease	28th Week Ending			Cumulative, 28th Week Ending		
	July 15, 1989	July 16, 1988	Median 1984-1988	July 15, 1989	July 16, 1988	Median 1984-1988
Acquired Immunodeficiency Syndrome (AIDS)	1,274	U*	277	18,586	16,703	6,657
Aseptic meningitis	148	114	235	2,614	2,510	2,570
Encephalitis: Primary (arthropod-borne & unspec)	14	11	26	324	397	464
Post-infectious	3	5	4	49	68	68
Gonorrhea: Civilian	11,643	13,906	14,589	347,390	358,918	427,301
Military	164	295	318	5,883	6,575	8,790
Hepatitis: Type A	664	402	402	16,058	13,124	11,719
Type B	459	430	499	11,974	11,841	13,358
Non A, Non B	51	40	82	1,255	1,406	1,912
Unspecified	36	31	62	1,327	1,135	2,513
Legionellosis	33	21	16	472	502	365
Leprosy	7	4	4	86	94	126
Malaria	39	25	25	597	415	452
Measles: Total†	238	44	86	5,028	1,631	2,025
Indigenous	230	40	84	7,660	1,459	1,788
Imported	8	4	4	388	172	230
Meningococcal infections	40	43	43	1,689	1,845	1,745
Mumps	89	63	63	3,242	3,109	2,694
Pertussis	58	41	41	1,237	1,209	1,086
Rubella (German measles)	26	8	10	265	129	335
Syphilis (Primary & Secondary): Civilian	784	556	520	21,358	20,119	14,788
Military	3	1	1	140	92	95
Toxic Shock syndrome	6	6	8	196	174	188
Tuberculosis	385	397	397	11,141	10,762	11,102
Tularemia	9	6	6	60	96	92
Typhoid Fever	8	11	5	228	194	167
Typhus fever, tick-borne (RMSF)	31	42	30	238	256	293
Rabies, animal	106	95	78	2,534	2,261	2,699

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1989		Cum. 1989
Anthrax	-	Leptospirosis	57
Botulism: Foodborne	14	Plague (N. Mex. 1, Colo. 1)	3
Infant	7	Poliomyelitis, Paralytic	-
Other	5	Psittacosis (Wisc. 3)	53
Brucellosis (NYC 1, Tex. 3, Calif. 1)	45	Rabies, human	1
Cholera	-	Tetanus (Mo. 1)	28
Congenital rubella syndrome	1	Trichinosis (NYC 1)	14
Congenital syphilis, ages < 1 year	81		
Diphtheria	-		

*Because AIDS cases are not received weekly from all reporting areas, comparison of weekly figures may be misleading.
†Seven of the 238 reported cases for this week were imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending July 15, 1989 and July 16, 1988 (28th Week)

Reporting Area	AIDS	Aseptic Meningitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionellosis	Leprosy
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1988	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989
UNITED STATES	18,586	2,814	324	49	347,390	358,918	18,058	11,974	1,255	1,327	472	86
NEW ENGLAND	807	120	12	2	9,916	10,741	381	589	50	55	33	5
Maine	41	8	5	-	152	221	8	22	3	1	5	-
N.H.	28	14	-	-	73	137	36	33	8	4	-	-
Vt.	8	8	1	-	36	77	25	42	5	-	-	-
Mass.	446	37	4	2	3,793	3,673	113	355	23	38	21	3
R.I.	41	27	-	-	710	993	24	43	3	3	7	1
Conn.	243	26	2	-	5,152	5,640	175	94	8	9	-	1
MID. ATLANTIC	5,066	283	48	5	45,011	57,274	2,205	1,850	108	181	118	10
Upstate N.Y.	558	123	15	4	7,916	6,944	517	370	46	6	38	1
N.Y. City	2,577	52	2	1	20,647	26,303	198	696	20	152	12	7
N.J.	1,289	-	31	-	7,339	8,010	235	344	11	5	22	1
Pa.	662	108	-	-	9,109	16,017	1,255	441	31	18	46	1
E.N. CENTRAL	1,518	368	84	2	61,407	57,013	984	1,472	134	49	121	3
Ohio	258	79	24	1	15,901	13,246	219	306	24	11	67	-
Ind.	260	61	21	-	4,838	4,489	82	233	19	16	20	1
Ill.	689	70	20	1	19,439	16,186	437	354	37	13	10	2
Mich.	253	136	23	-	16,539	18,033	188	382	35	9	18	-
Wis.	68	22	5	-	4,690	5,057	78	217	19	-	6	-
W.N. CENTRAL	417	106	14	3	16,524	14,584	638	505	51	13	25	1
Minn.	93	5	-	1	1,718	1,987	57	55	10	3	2	-
Iowa	35	19	3	-	1,387	1,091	50	22	9	-	5	-
Mo.	193	36	-	-	9,885	8,233	342	354	19	5	10	-
N. Dak.	3	4	1	-	68	96	4	16	3	1	1	-
S. Dak.	4	6	3	-	141	288	5	6	4	-	1	-
Nebr.	16	6	3	-	873	860	55	14	-	2	2	1
Kans.	73	30	4	2	2,452	2,029	125	38	6	2	4	-
S. ATLANTIC	3,897	535	48	19	97,951	101,861	1,643	2,312	184	189	63	1
Del.	55	14	1	-	1,590	1,502	26	79	5	2	6	-
Md.	415	68	11	2	10,658	10,415	387	408	17	20	15	-
D.C.	314	6	-	-	6,505	7,524	2	15	2	-	-	-
Va.	237	75	22	-	8,145	7,134	171	151	30	122	3	-
W. Va.	25	6	7	-	740	743	11	48	5	3	-	-
N.C.	278	69	2	1	14,821	14,835	248	555	51	-	20	1
S.C.	199	12	-	-	8,848	7,667	30	319	3	7	3	-
Ga.	565	50	1	-	18,881	19,549	176	241	9	6	7	-
Fla.	1,809	235	4	16	27,763	32,692	494	496	62	29	9	-
E.S. CENTRAL	411	261	17	1	28,281	27,851	215	878	90	3	18	-
Ky.	63	63	6	1	2,741	2,684	66	240	27	2	3	-
Tenn.	147	42	-	-	9,409	9,320	86	473	20	-	10	-
Ala.	113	111	11	-	8,817	8,857	42	114	39	1	5	-
Miss.	88	45	-	-	7,314	6,990	21	51	4	-	-	-
W.S. CENTRAL	1,680	329	37	2	37,407	40,362	2,133	1,208	87	318	27	13
Ark.	47	10	2	-	3,935	3,895	124	42	6	5	1	-
La.	251	22	6	-	7,689	8,329	159	204	9	1	4	-
Okla.	91	29	8	-	3,199	3,675	217	119	18	18	18	-
Tex.	1,291	268	21	2	22,584	24,463	1,633	843	54	294	4	13
MOUNTAIN	629	91	7	2	7,601	7,811	2,510	730	128	96	26	2
Mont.	10	3	-	-	108	239	32	27	3	2	2	1
Idaho	14	-	-	1	103	212	88	58	8	2	-	-
Wyo.	12	2	-	-	51	129	23	4	2	-	-	-
Colo.	227	42	1	1	1,635	1,795	317	106	40	40	3	-
N. Mex.	53	6	1	-	751	723	329	106	25	2	2	-
Ariz.	164	27	2	-	2,839	2,752	1,287	249	27	42	9	1
Utah	38	9	1	-	230	311	216	57	14	4	6	-
Nev.	111	2	2	-	1,884	1,650	218	123	9	4	4	-
PACIFIC	4,161	521	47	13	43,292	41,421	7,449	2,430	423	423	41	51
Wash.	309	-	2	1	3,280	3,679	1,762	521	123	31	12	5
Oreg.	138	-	-	-	1,627	1,660	1,306	264	45	8	1	1
Calif.	3,643	492	40	12	37,612	35,100	3,814	1,559	245	374	25	41
Alaska	8	5	4	-	507	602	448	33	5	3	1	-
Hawaii	63	24	1	-	266	380	119	53	5	7	2	4
Guam	1	-	-	-	-	83	-	-	-	-	-	-
P.R.	783	56	2	1	572	778	98	126	13	13	-	8
V.I.	22	-	-	-	353	218	-	4	-	-	-	-
Amer. Samoa	-	-	-	-	-	58	-	-	-	-	-	-
C.N.M.I.	-	-	-	-	-	33	-	-	-	-	-	-

N: Not notifiable U: Unavailable C.N.M.I.: Commonwealth of the Northern Mariana Islands

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending July 15, 1989 and July 16, 1988 (28th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-gococcal infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total									
	Cum. 1989	1989	Cum. 1989	1989	Cum. 1989	Cum. 1988	Cum. 1989	1989	Cum. 1989	1989	Cum. 1989	Cum. 1988	1989	Cum. 1989	Cum. 1988
UNITED STATES	997	230	7,660	8	368	1,631	1,689	89	3,242	58	1,237	1,209	26	265	129
NEW ENGLAND	38	2	217	-	21	105	118	-	62	-	226	148	-	6	1
Maine	-	-	-	-	-	7	13	-	-	-	4	11	-	-	-
N.H.	2	-	8	-	-	67	15	-	10	-	5	29	-	4	-
Vt.	1	-	1	-	-	-	6	-	-	-	6	2	-	1	-
Mass.	22	2	26	-	16	1	57	-	45	-	194	96	-	1	-
R.I.	6	-	38	-	3	-	1	-	-	-	8	2	-	-	1
Conn.	5	-	144	-	2	10	26	-	7	-	9	9	-	-	-
MID. ATLANTIC	97	35	547	-	158	552	243	10	183	4	68	59	8	20	11
Upstate N.Y.	16	-	40	-	94	18	81	8	114	3	38	38	3	7	2
N.Y. City	33	6	52	-	14	41	29	-	16	-	2	1	5	13	6
N.J.	23	-	279	-	-	14	51	-	11	-	14	4	-	-	1
Pa.	23	29	176	-	50	479	82	2	42	1	14	16	-	-	2
E.N. CENTRAL	45	-	1,383	-	52	171	206	1	281	1	104	153	-	18	22
Ohio	8	-	626	-	35	23	79	-	8	-	1	25	-	3	-
Ind.	5	-	33	-	-	56	22	-	18	-	8	52	-	-	-
Ill.	19	-	592	-	-	68	68	-	124	-	45	22	-	13	19
Mich.	8	-	9	-	6	22	34	1	102	1	25	21	-	1	4
Wis.	5	-	124	-	11	2	13	-	29	-	25	33	-	1	-
W.N. CENTRAL	17	25	481	-	4	11	54	2	352	1	37	61	-	4	-
Minn.	6	-	-	-	-	10	10	-	1	-	7	16	-	-	-
Iowa	2	-	4	-	1	-	2	2	24	-	10	16	-	-	-
Mo.	4	-	237	-	-	1	19	-	47	-	16	13	-	3	-
N. Dak.	1	-	-	-	-	-	-	-	-	-	-	10	-	-	-
S. Dak.	1	-	-	-	-	-	6	-	-	-	1	2	-	-	-
Nebr.	1	-	108	-	2	-	11	-	5	1	3	-	-	-	-
Kans.	2	25	132	-	1	-	6	-	275	-	1	4	-	1	-
S. ATLANTIC	161	-	376	-	27	253	280	20	553	6	95	126	-	7	15
Del.	3	-	58	-	1	-	2	-	1	-	1	3	-	-	-
Md.	16	-	35	-	15	6	48	12	333	-	10	26	-	2	-
D.C.	4	-	7	-	3	-	13	-	77	-	-	-	-	-	-
Va.	16	-	18	-	3	143	28	-	65	-	6	16	-	-	11
W. Va.	2	-	28	-	-	6	10	1	10	3	15	3	-	-	-
N.C.	14	-	167	-	-	1	42	2	19	-	20	33	-	1	-
S.C.	3	-	-	-	-	-	15	1	18	-	-	1	-	-	-
Ga.	6	-	-	-	-	-	52	4	11	3	13	20	-	-	1
Fla.	35	-	63	-	5	95	70	-	19	-	30	24	-	4	3
E.S. CENTRAL	7	48	159	-	-	61	51	5	104	9	52	24	-	2	-
Ky.	-	10	20	-	-	32	31	-	9	-	1	-	-	-	-
Tenn.	1	38	95	-	-	-	3	4	32	6	15	12	-	2	-
Ala.	4	-	44	-	-	-	14	1	14	3	34	10	-	-	-
Miss.	2	-	-	-	-	29	3	N	N	-	2	2	-	-	-
W.S. CENTRAL	32	72	2,914	2	40	14	118	36	1,201	12	87	72	14	38	6
Ark.	-	-	-	-	2	1	6	4	122	1	12	7	-	-	2
La.	2	-	6	-	-	-	26	30	480	1	6	11	-	5	-
Okla.	4	-	108	-	-	8	13	-	165	-	14	27	-	1	1
Tex.	26	72	2,800	21	38	5	73	2	434	10	55	27	14	30	3
MOUNTAIN	16	42	291	-	19	117	44	2	114	12	390	340	-	31	6
Mont.	1	-	12	-	1	2	1	-	2	7	17	1	-	1	-
Idaho	2	-	-	-	2	1	2	-	9	2	50	248	-	28	-
Wyo.	1	-	-	-	-	-	-	-	7	-	-	1	-	1	-
Colo.	2	-	59	-	1	114	18	2	18	-	19	13	-	-	1
N. Mex.	1	-	16	-	15	-	-	N	N	-	6	6	-	-	-
Ariz.	6	37	109	-	-	-	19	-	71	1	286	48	-	-	-
Utah	-	5	95	-	-	-	4	-	3	2	11	22	-	-	3
Nev.	3	-	-	-	-	-	-	-	4	-	1	1	-	1	1
PACIFIC	246	6	1,292	6	47	347	575	13	392	13	178	225	4	141	69
Wash.	20	-	20	-	12	2	60	4	28	10	58	47	-	-	-
Oreg.	12	-	-	3†	15	3	40	N	N	1	7	9	-	2	-
Calif.	207	4	1,254	-	12	334	470	9	353	2	109	117	3	116	50
Alaska	3	-	-	-	-	-	4	-	1	-	-	6	-	-	-
Hawaii	4	2	18	3†§	8	8	1	-	10	-	4	46	1	23	19
Guam	-	U	-	U	-	1	-	U	-	U	-	-	U	-	1
P.R.	1	-	414	-	-	189	4	-	8	1	4	9	-	6	1
V.I.	-	U	4	U	-	-	-	U	11	U	-	-	U	-	-
Amer. Samoa	-	U	-	U	-	-	-	U	-	U	-	-	U	-	-
C.N.M.I.	-	U	-	U	-	-	-	U	-	U	-	-	U	-	-

*For measles only, imported cases includes both out-of-state and international importations.

N: Not notifiable U: Unavailable †International §Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending July 15, 1989 and July 16, 1988 (28th Week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic-shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1989	Cum. 1988	Cum. 1989	Cum. 1989	Cum. 1988	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989
UNITED STATES	21,358	20,119	196	11,141	10,762	60	228	238	2,534
NEW ENGLAND	879	569	7	286	258	-	18	3	3
Maine	5	8	3	3	16	-	-	-	1
N.H.	3	6	-	16	6	-	-	-	-
Vt.	-	2	-	4	2	-	-	-	-
Mass.	268	220	1	143	149	-	9	1	1
R.I.	15	17	-	37	24	-	5	1	-
Conn.	588	316	3	83	61	-	4	1	1
MID. ATLANTIC	3,923	4,042	30	2,092	2,060	2	59	24	340
Upstate N.Y.	454	269	5	180	284	1	6	6	9
N.Y. City	2,030	2,579	2	1,187	1,023	-	38	3	-
N.J.	709	459	8	347	382	-	9	10	-
Pa.	730	735	15	378	371	1	6	5	331
E.N. CENTRAL	973	606	29	1,202	1,192	3	23	36	60
Ohio	67	61	7	219	232	-	4	19	2
Ind.	33	34	5	105	124	1	1	12	2
Ill.	407	281	5	529	495	-	14	4	14
Mich.	334	194	12	284	284	1	3	1	6
Wis.	132	36	-	66	57	1	1	-	36
W.N. CENTRAL	179	122	25	273	280	24	6	38	375
Minn.	19	9	7	53	44	-	1	-	62
Iowa	21	14	4	28	22	-	2	1	110
Mo.	93	72	4	121	139	14	1	34	25
N. Dak.	1	2	-	9	9	-	-	-	29
S. Dak.	-	-	3	14	21	6	-	1	55
Nebr.	17	19	5	11	9	-	-	-	60
Kans.	28	6	2	37	36	4	1	2	34
S. ATLANTIC	7,886	7,285	19	2,304	2,316	2	20	62	772
Del.	86	65	-	22	20	-	2	-	16
Md.	404	398	1	197	233	-	4	7	219
D.C.	499	348	1	91	96	-	2	-	2
Va.	295	229	4	197	219	2	3	3	145
W. Va.	9	7	-	40	44	-	-	1	34
N.C.	508	409	6	273	205	-	2	32	3
S.C.	431	360	3	266	261	-	-	10	123
Ga.	1,651	1,196	3	349	372	-	2	7	130
Fla.	4,003	4,273	1	869	866	-	5	2	100
E.S. CENTRAL	1,405	1,041	4	928	893	5	1	25	216
Ky.	31	36	1	221	219	1	1	7	95
Tenn.	603	446	1	265	255	3	-	16	55
Ala.	441	302	2	262	271	-	-	2	65
Miss.	330	257	-	180	148	1	-	-	1
W.S. CENTRAL	2,946	2,279	19	1,324	1,382	16	9	33	380
Ark.	190	123	1	138	148	8	-	10	51
La.	690	442	-	168	190	-	1	-	3
Okla.	51	93	11	113	130	8	1	22	59
Tex.	2,015	1,631	7	905	924	-	7	1	267
MOUNTAIN	417	379	24	233	279	5	4	15	130
Mont.	1	2	-	8	5	-	-	10	51
Idaho	1	2	2	9	11	-	-	1	-
Wyo.	3	1	2	-	1	-	-	1	39
Colo.	52	62	4	12	43	2	1	3	7
N. Mex.	17	25	2	43	55	1	-	-	15
Ariz.	118	99	9	112	126	-	2	-	15
Utah	11	11	3	24	10	2	1	-	2
Nev.	214	177	2	25	28	-	-	-	1
PACIFIC	2,750	3,796	39	2,499	2,102	3	89	2	258
Wash.	136	122	2	121	122	-	5	-	-
Oreg.	137	157	-	76	78	1	5	1	-
Calif.	2,467	3,488	36	2,191	1,789	2	77	1	197
Alaska	3	8	-	24	24	-	-	-	61
Hawaii	7	21	1	87	89	-	2	-	-
Guam	-	3	-	-	11	-	-	-	-
P.R.	290	340	-	151	105	-	-	-	35
V.I.	2	1	-	4	4	-	-	-	-
Amer. Samoa	-	-	-	-	3	-	-	-	-
C.N.M.I.	-	1	-	-	16	-	-	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending July 15, 1989 (28th Week)

Reporting Area	All Causes, By Age (Years)						P&I**
	All Ages	>65	45-64	25-44	1-24	<1	Total
NEW ENGLAND	602	416	103	38	22	23	55
Boston, Mass.	162	101	27	15	8	11	29
Bridgeport, Conn.	44	33	10	-	-	1	4
Cambridge, Mass.	21	17	3	1	-	-	2
Fall River, Mass.	22	18	2	2	-	-	-
Hartford, Conn.	86	53	18	7	4	4	6
Lowell, Mass.	23	17	4	1	-	1	-
Lynn, Mass.	8	5	1	1	1	-	-
New Bedford, Mass.	21	15	3	2	1	-	-
New Haven, Conn.	42	29	5	4	4	-	4
Providence, R.I.	38	27	6	-	2	3	3
Somerville, Mass.	11	7	3	-	1	-	1
Springfield, Mass.§	41	31	8	1	-	1	4
Waterbury, Conn.	31	23	5	1	1	1	-
Worcester, Mass.	52	40	8	3	-	1	2
MID. ATLANTIC	2,601	1,635	507	300	81	75	143
Albany, N.Y.	46	36	7	2	1	-	1
Allentown, Pa.	16	12	3	1	-	-	-
Buffalo, N.Y.	101	71	20	5	4	1	14
Camden, N.J.	33	21	6	3	3	-	-
Elizabeth, N.J.	39	27	8	3	1	-	4
Erie, Pa.†	51	29	14	3	2	3	7
Jersey City, N.J.	80	34	13	7	-	26	2
N.Y. City, N.Y.	1,447	885	298	196	43	25	54
Newark, N.J.	78	32	17	18	4	4	6
Paterson, N.J.	28	18	7	3	-	-	1
Philadelphia, Pa.	244	148	47	33	12	4	19
Pittsburgh, Pa.†	60	46	9	1	2	2	7
Reading, Pa.	25	21	3	1	-	-	4
Rochester, N.Y.	119	89	18	6	1	5	11
Schenectady, N.Y.	29	23	4	-	1	1	1
Scranton, Pa.†	30	24	3	1	1	1	3
Syracuse, N.Y.	104	67	19	11	5	2	5
Trenton, N.J.	24	15	6	1	1	1	2
Utica, N.Y.	21	17	2	2	-	-	1
Yonkers, N.Y.	28	20	3	3	-	-	1
E.N. CENTRAL	2,274	1,500	473	170	55	76	105
Akron, Ohio	60	40	11	5	1	3	5
Canton, Ohio	26	14	12	-	-	-	6
Chicago, Ill.§	504	362	125	45	10	22	16
Cincinnati, Ohio	122	78	26	13	3	2	7
Cleveland, Ohio	163	105	35	6	2	5	5
Columbus, Ohio	83	49	16	10	3	5	2
Dayton, Ohio	118	77	32	4	1	4	6
Detroit, Mich.	286	169	57	35	13	12	9
Evansville, Ind.	41	34	4	2	-	1	3
Fort Wayne, Ind.	80	51	16	8	3	2	1
Gary, Ind.	14	10	3	-	1	-	-
Grand Rapids, Mich.	69	53	11	2	3	-	8
Indianapolis, Ind.	182	117	40	11	5	9	4
Madison, Wis.§	39	27	6	3	1	2	3
Milwaukee, Wis.	134	106	18	5	3	2	15
Peoria, Ill.	36	26	8	1	1	-	-
Rockford, Ill.	53	33	14	4	-	2	6
South Bend, Ind.	52	36	8	7	-	1	2
Toledo, Ohio	113	79	22	5	4	3	6
Youngstown, Ohio	49	34	9	4	1	1	1
W.N. CENTRAL	894	620	161	62	30	21	51
Des Moines, Iowa	60	34	17	3	3	3	3
Duluth, Minn.	35	29	4	2	-	-	3
Kansas City, Kans.	33	23	4	4	1	1	1
Kansas City, Mo.	117	84	21	8	2	2	8
Lincoln, Nebr.	44	32	8	2	2	-	5
Minneapolis, Minn.	271	190	44	16	11	10	18
Omaha, Nebr.	99	57	30	9	2	1	6
St. Louis, Mo.	140	102	17	11	7	3	4
St. Paul, Minn.	56	42	7	4	2	1	1
Wichita, Kans.	39	27	9	3	-	-	2
S. ATLANTIC	1,193	680	290	142	45	35	53
Atlanta, Ga.	170	82	42	31	9	6	5
Baltimore, Md.	124	63	33	19	2	7	3
Charlotte, N.C.	113	72	28	5	8	-	7
Jacksonville, Fla.	111	61	31	10	7	2	8
Miami, Fla.	110	57	30	20	1	2	1
Norfolk, Va.	60	39	14	5	2	-	2
Richmond, Va.	90	60	23	7	3	7	9
Savannah, Ga.	41	30	8	2	1	-	6
St. Petersburg, Fla.	84	62	13	3	1	5	2
Tampa, Fla.	78	50	14	8	3	2	5
Washington, D.C.	188	96	50	30	8	4	4
Wilmington, Del.	24	18	4	2	-	-	1
E.S. CENTRAL	764	506	147	51	25	35	39
Birmingham, Ala.	139	84	18	15	7	15	3
Chattanooga, Tenn.	60	43	14	2	1	-	5
Knoxville, Tenn.	60	43	9	2	1	5	7
Louisville, Ky.	139	92	31	9	3	4	5
Memphis, Tenn.	143	84	27	12	10	10	9
Mobile, Ala.	57	42	11	3	-	1	-
Montgomery, Ala.	38	30	7	1	-	-	4
Nashville, Tenn.	128	68	30	7	3	-	6
W.S. CENTRAL	1,813	1,078	393	209	69	64	61
Austin, Tex.	68	39	15	8	3	3	2
Baton Rouge, La.	48	31	10	4	-	3	1
Corpus Christi, Tex.	41	25	12	2	-	2	1
Dallas, Tex.	251	141	52	35	11	12	9
El Paso, Tex.	74	47	16	7	3	1	4
Fort Worth, Tex	116	61	22	14	7	12	5
Houston, Tex.§	734	436	169	89	24	16	18
Little Rock, Ark.	66	43	13	3	3	4	3
New Orleans, La.	80	46	12	14	6	2	-
San Antonio, Tex.	194	119	42	19	8	6	8
Shreveport, La.	45	26	9	7	2	1	1
Tulsa, Okla.	96	64	21	7	2	2	9
MOUNTAIN	722	435	141	76	39	30	35
Albuquerque, N. Mex.	89	55	11	12	8	3	9
Colo. Springs, Colo.	46	28	11	6	-	1	4
Denver, Colo.	128	71	26	18	6	5	6
Las Vegas, Nev.	104	58	27	7	7	4	5
Ogden, Utah	26	24	1	-	-	1	2
Phoenix, Ariz.	170	96	34	20	11	9	2
Pueblo, Colo.	17	13	1	2	-	1	1
Salt Lake City, Utah	45	23	7	5	5	5	-
Tucson, Ariz.	97	67	21	6	2	1	6
PACIFIC	1,957	1,250	342	236	69	62	125
Berkeley, Calif.	24	13	7	4	-	-	1
Fresno, Calif.	97	60	12	15	6	4	16
Glendale, Calif.§	25	22	1	2	-	-	-
Honolulu, Hawaii	73	50	15	7	1	-	11
Long Beach, Calif.	91	57	17	12	1	4	10
Los Angeles Calif.§	514	307	97	71	22	11	17
Oakland, Calif.	72	42	8	12	2	8	4
Pasadena, Calif.	28	20	3	3	2	-	-
Portland, Oreg.	117	84	18	9	1	5	7
Sacramento, Calif.	163	104	36	11	6	6	15
San Diego, Calif.	154	98	27	20	5	3	11
San Francisco, Calif.	172	90	37	31	5	8	7
San Jose, Calif.	164	103	30	21	3	7	12
Seattle, Wash.	154	115	23	10	3	3	3
Spokane, Wash.	50	38	5	3	1	3	4
Tacoma, Wash.	59	47	6	5	1	-	7
TOTAL	12,820††	8,120	2,557	1,284	425	421	667

*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

**Pneumonia and influenza.

†Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

††Total includes unknown ages.

§Data not available. Figures are estimates based on average of past available 4 weeks.

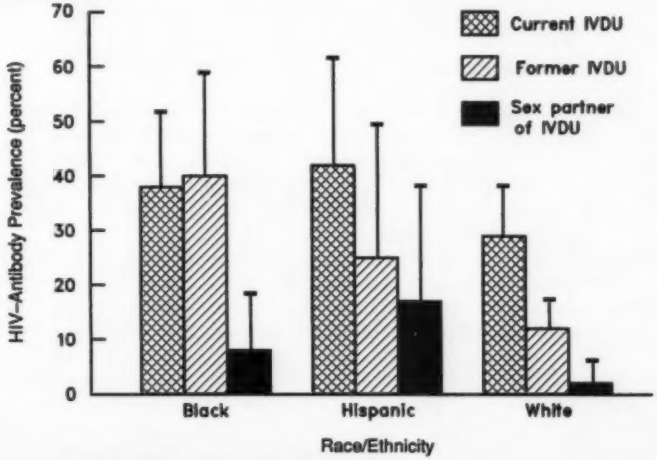
Project TRUST – Continued

TABLE 1. HIV-antibody prevalence and return visits for receipt of test results of Project TRUST clients, by sex, race/ethnicity, and risk-exposure group – Boston, November 1987–October 1988

Characteristic	No. tested (%)	No. seropositive (% ± S.E.*)	No. returning for results (%)
Sex			
Male	434 (68)	80 (18 ± 2)	344 (79)
Female	201 (32)	27 (13 ± 2)	159 (79)
Race/ethnicity			
White	451 (71)	57 (13 ± 2)	371 (82)
Black	118 (19)	32 (27 ± 4)	81 (69)
Hispanic	61 (10)	18 (30 ± 6)	47 (77)
Other	5 (1)	0	4 (80)
Risk exposure group			
Current IVDU	165 (26)	54 (33 ± 4)	122 (74)
Former IVDU	222 (35)	35 (16 ± 2)	182 (82)
Sex partner of IVDU	102 (16)	5 (5 ± 2)	82 (80)
Homosexual/bisexual male	14 (2)	3 (21 ± 11)	14 (100)
No acknowledged risk factor	132 (21)	10 (8 ± 2)	103 (78)
Total	**635 (100)**	**107 (17 ± 1)**	**503 (79)**

*Standard error.

FIGURE 1. HIV-antibody prevalence of Project TRUST clients, by race/ethnicity and risk exposure group*



*Error bars indicate upper 95% confidence limits.

Project TRUST – Continued

name). The high percentage (79%) of IVDUs who returned for their test results indicates that HIV prevention measures can be effectively provided to IVDUs if services are tailored to the specific needs and circumstances of this high-risk group.

A constraint of anonymous testing is the inability to reach seropositive persons who fail to return. Project TRUST and other programs providing HIV testing must develop follow-up approaches to reach such clients.

To induce long-term changes in the behavior of IVDUs, ongoing counseling and education and access to drug treatment are necessary (*2*). IVDUs also need medical services such as detoxification programs and screening and therapy for tuberculosis (*3*) and STDs (*4*). Clinical evaluation of HIV-infected IVDUs should include T-cell phenotyping and, when indicated, prophylaxis against *Pneumocystis carinii* pneumonia (*5*). Local efforts such as Project TRUST and others (*6*) to provide IVDUs with HIV-antibody testing, counseling, and other services are important in directing efforts to a group accounting for an increasing percentage of HIV infections and AIDS cases.

References

1. CDC. Update: acquired immunodeficiency syndrome associated with intravenous-drug use—United States, 1988. MMWR 1989;38:165–70.
2. Brickner PW, Torres RA, Barnes M, et al. Recommendations for control and prevention of human immunodeficiency virus (HIV) infection in intravenous drug users. Ann Intern Med 1989;110:833–7.
3. CDC. A strategic plan for the elimination of tuberculosis in the United States. MMWR 1989;38(no. S-3):5.
4. CDC. Relationship of syphilis to drug use and prostitution—Connecticut and Philadelphia, Pennsylvania. MMWR 1988;37:755–8,764.
5. CDC. Guidelines for prophylaxis against *Pneumocystis carinii* pneumonia for persons infected with human immunodeficiency virus. MMWR 1989;38(no. S-5).
6. CDC. Coordinated community programs for HIV prevention among intravenous-drug users —California, Massachusetts. MMWR 1989;38:369–74.

HIV Infection Reporting – United States

All 50 states and the District of Columbia require health-care providers to report new cases of acquired immunodeficiency syndrome (AIDS) to their state health departments. As of July 1989, 28 (56%) states also required reporting of persons infected with human immunodeficiency virus (HIV) (Figure 1). In addition, 10 states (as of May 1989) have proposals on reporting currently before their legislatures, governors, or voting constituencies.

The 28 states that require HIV infection reporting account for 45% of the U.S. population and 24% of U.S. AIDS cases reported as of June 30, 1989. States with HIV infection reporting had a lower median cumulative incidence of AIDS (388 AIDS cases per state or 14 cases per 100,000 population) than states without reporting (1244 AIDS cases per state or 31 cases per 100,000 population). Thirteen (46%) states with HIV infection reporting had >500 cumulative AIDS cases, compared with 14 (64%) states without reporting.

Reporting systems among the 28 states have been developed independently and therefore vary widely in methodology and information collected. In 21 (75%) states, reporting is the responsibility of both the physician caring for the patient and the

HIV Infection Reporting — Continued

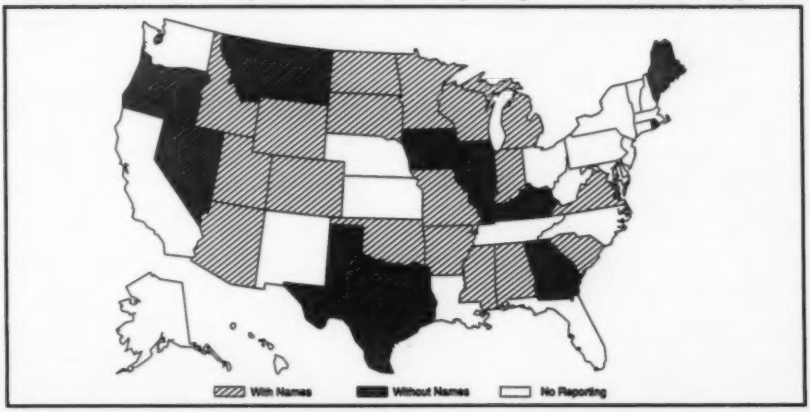
laboratory that tested the patient's blood for HIV antibody. In five (18%) states, reporting is the physician's responsibility alone, and in two (7%) states, it is the laboratory's responsibility alone. Twenty (71%) states require a positive result on a supplemental test (Western blot or immunofluorescence assay) in addition to a repeatedly reactive enzyme immunoassay (EIA) before a patient is reported; three (11%) states will accept reports on patients repeatedly reactive on EIA; five (18%) states will accept reports on patients reactive on an initial EIA. All states, however, recommend supplemental testing before patient follow-up or initiation of partner notification procedures.

Eighteen (64%) of the 28 states require HIV reporting by patient's name (Figure 1); however, under certain circumstances, 10 of the 18 states permit anonymous testing and therefore do not receive names on some reports. Most states request basic demographic data, and more than half request HIV risk information. Twelve (43%) collect clinical information, e.g., eight (29%) ask whether the patient was symptomatic, and four (14%) collect sufficient information to allow use of the CDC HIV infection classification system (*1*).

Reported by: State and territorial health departments. AIDS Program, Center for Infectious Diseases, CDC.

Editorial Note: HIV infection reports are useful in directing HIV-related prevention activities such as patient counseling, partner notification, and referral for appropriate medical management (e.g., evaluation for prophylaxis against *Pneumocystis carinii* pneumonia [*2*]). Reporting of HIV-infected persons may enable earlier recognition of persons with or at risk for HIV infection and earlier interventions to prevent further spread of HIV. Recent guidelines for initiation of therapy in some HIV-infected persons emphasize the need for identifying persons who need treatment before the diagnosis of AIDS is made (*2*). HIV infection reports are also useful for guiding pediatric medical and social support programs, including programs for infants whose infection status may remain undetermined until they are ≥15 months of age (*3*). Prevention activities and medical management of patients can be carried out without requiring HIV

FIGURE 1. States with required HIV infection reporting — United States, July 1989



HIV Infection Reporting — Continued

infection reporting (*4*), but a reporting system can provide a framework for maintaining these activities.

HIV infection reports that are now integral to public health programs in many states are not anticipated to be representative of all HIV-infected persons. Such reports represent only those persons within the infected population who are tested and reported at a given time. Testing and reporting may be influenced by factors other than the incidence and prevalence of AIDS, e.g., public awareness of risk factors, confidentiality concerns, and testing accessibility. While HIV infection reports complement other HIV/AIDS studies of HIV infection in a community (*5,6*), AIDS surveillance and the HIV family of surveys (*7*) remain the basis for determining the current status and course of HIV infection in the United States.

In February 1989, CDC conducted a workshop for all states that had had HIV infection reporting for at least 1 year and selected states that had initiated reporting more recently or were considering initiating reporting. The workshop addressed standardization of HIV infection reports to increase their usefulness and to enable a comparison of results between states. Participants developed recommendations for states with HIV infection reporting (Table 1) and affirmed the continued need for AIDS surveillance and HIV serosurveys.

TABLE 1. Recommended elements* of HIV infection reporting

1. States requiring reports of HIV infection with or without personal identifiers should collect a minimum set of information to allow comparison of data beyond the state level. Reports should be collected in a manner that allows repeat positive reports to be excluded.
2. Data collected for HIV infection reporting (e.g., risk factor) should be consistent with data collected for other HIV activities such as AIDS case reporting and results from counseling and testing sites.
3. HIV infection reporting should be accompanied by appropriate safeguards for confidentiality to protect the individual and to reduce the potential negative impact on participation in voluntary counseling and testing activities.
4. CDC should collect summary data without personal identifiers and disseminate on a regular basis a minimum set of data from states with mandatory and voluntary reporting of HIV infection. These data should include age, sex, race/ethnicity, state of residence, and if possible, transmission category and clinical status. These data should include only reports on persons with appropriate supplemental testing. A concerted attempt should be made to exclude repeat positives. The data should be reported in a standardized format to allow comparisons over time and between areas; however, distinctions in methodology by state (e.g., reporting with or without names) should be carefully noted.
5. HIV infection reporting should not interfere with AIDS case reporting or seroprevalence surveys. AIDS case reporting and seroprevalence surveys should be the primary means by which trends in incidence of HIV infection in the United States are followed.
6. HIV infection reporting needs to be evaluated rigorously to determine its usefulness in prevention programs and in monitoring trends. This evaluation should be conducted jointly by the states and CDC.

*Developed by participants from the Workshop on Standardization of HIV Infection Reporting held February 8–9, 1989, in Atlanta. The participants represented the following states: Alabama, Arizona, Colorado, Georgia, Idaho, Kentucky, Maine, Minnesota, Missouri, New Jersey, Oklahoma, Oregon, Rhode Island, South Carolina, Texas, and Wisconsin.

HIV Infection Reporting — Continued

References

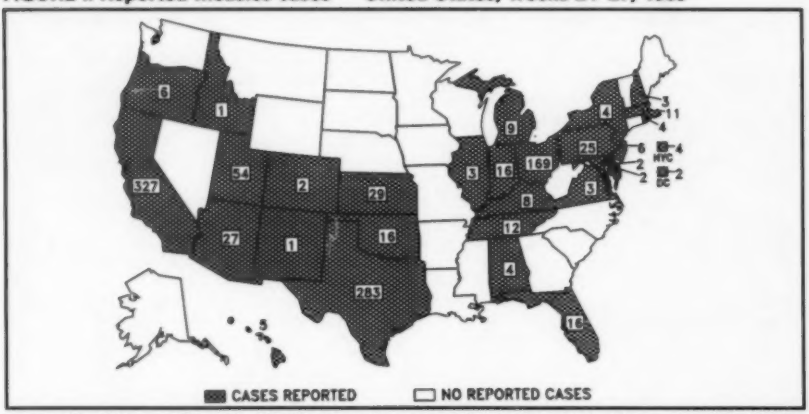
1. CDC. Classification system for human T-lymphotropic virus type III/lymphadenopathy-associated virus infections. MMWR 1986;35:334–9.
2. CDC. Guidelines for prophylaxis against *Pneumocystis carinii* pneumonia for persons infected with human immunodeficiency virus. MMWR 1989;38(no. S-5).
3. CDC. Classification system for human immunodeficiency virus (HIV) infection in children under 13 years of age. MMWR 1987;36:225–30,236.
4. Blankenship EM, Owen-O'Dowd JM, Jolly DH, Petz WJ, Meriwether RA. HIV partner notification within an anonymous testing system [Abstract]. V International Conference on AIDS. Montreal, June 4–9, 1989:743.
5. Hoffman RE, Valway SE, Wolf FC, et al. Comparison of AIDS and HIV antibody surveillance data in Colorado. J Acquired Immune Deficiency Syndromes 1989;2:194–200.
6. MacDonald K, Danila R, Reier D, Heiser J, Stiepan D, Osterholm M. Surveillance for HIV infection in Minnesota: results from the first three years of operation [Abstract]. V International Conference on AIDS. Montreal, June 4–9, 1989:59.
7. CDC. AIDS and human immunodeficiency virus infection in the United States: 1988 update. MMWR 1989;38(no. S-4):8–11.

Notice to Readers

Announcement of "Epidemiology in Action" Course

CDC and Emory University will cosponsor a course in the practical application of epidemiology to public health problems directed at practicing state and local health department professionals. The course, "Epidemiology in Action," will be held at CDC November 6–17, 1989, and will comprise lectures, workshops, classroom exercises including working through actual epidemiologic problems, discussions, and a community telephone survey. There will be a continuing education fee for all participants. Applications must arrive at the Division of Public Health, Emory University, by August 25, 1989. For further information and/or an application form, contact: Philip S. Brachman, M.D., Emory University, Division of Public Health, 1599 Clifton Road, N.E., Atlanta, GA 30329; telephone (404) 727-0199.

FIGURE I. Reported measles cases — United States, weeks 24–27, 1989



The *Morbidity and Mortality Weekly Report* is prepared by the Centers for Disease Control, Atlanta, Georgia, and available on a paid subscription basis from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, (202) 783-3238.

The data in this report are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday. The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: Editor, *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Atlanta, Georgia 30333; telephone (404) 332-4555.

Acting Director, Centers for Disease Control
Walter R. Dowdle, Ph.D.

Acting Director, Epidemiology Program Office
Michael B. Gregg, M.D.

Editor, *MMWR* Series
Richard A. Goodman, M.D., M.P.H.

Managing Editor
Karen L. Foster, M.A.

☆U.S. Government Printing Office: 1989-631-108/02015 Region IV

UNITED STATES GOVERNMENT PRINTING OFFICE
SUPERINTENDENT OF DOCUMENTS
Washington, D.C. 20402

BULK RATE
POSTAGE & FEES PAID
GPO
Permit No. G-26

OFFICIAL BUSINESS
Penalty for Private Use, $300

HHS Publication No. (CDC) 89-8017

Redistribution using permit imprint is illegal.